Attachment 4

Equipment Specifications

SPECIFICATIONS FOR MODEL 14-23 CEMENT BATCHER VENT

MODEL 14-23 SPECIFICATIONS

TOTAL CLOTH AREA	23 SQ. FT.
NUMBER OF BAGS	14
HOUSING HEIGHT	1'-10"
HOUSING WIDTH & LENGTH	0'-10" X 2'-11"
BAG CLEANING METHOD	REVERSE AIR FLOW (From batcher filling and emptying)
MAXIMUM OPERATING TEMPERATURE	170 DEGREES F
CAPACITY	180 CFM MAXIMUM
DISCHARGE SHAPE	(2) 2" X 12" SLOTS
CFM/FT^2 THROUGH BAGS	7.83 MAXIMUM
AIRSPEED OUT OF DEVICE	545 FT / MIN
DIRECTION OF AIR DISCHARGE	DOWN
DISCHARGE AREA	.33 FT ^{2} (48 IN^2)
NORMAL OPERATING TEMP & PRESSURE	AMBIENT

BAG SPECIFICATIONS

BAG DIAMETER	4-1/2" DIA.
BAG LENGTH	16"
CONSTRUCTION	3 X 1 TWILL
FIBER	POLYESTER
FINISH	GREIGE
WEIGHT	7.1 OZ./SQ. YD.
THICKNESS	0.019"
MULLEN BURST	275 PSI (Min)
PERMEABILITY RANGE (0.5" WATER)	30-55 CFM/SQ. FT.
BAG EFFICIENCY	99.9% (*)

BATCHER VENT	INTO BAGS
LB / HR	(.04 LB / YD ^{3}) * (___YD^3 HR)
GR / FT^3	(.648 GR HR / LB FT ^{3}) * (___LB / HR)

OUT OF BAGS

FOR ALL OUT OF BAGS VALUES, MULTIPLY THE INTO BAGS VALUES BY 0.001.

* BASED ON TESTS BY THE UNIVERSITY OF TENNESSEE.

SPECIFICATIONS FOR MODEL PJC-300S CARTRIDGE DUST CONTROL

MODEL CON-E-CO-PJC-300S

NUMBER OF CARTRIDGES	8
NOMINAL CARTRIDGE DIAMETER	8"
NOMINAL CARTRIDGE LENGTH	40"
TOTAL FILTRATION AREA	304 SQ. FT.
MIN. DESIGN EFFICIENCY OF DUST COLLECTOR	99.9%
AIR TO CLOTH RATIO	5.0 TO 1.0 (CEMENT)
CAPACITY FOR CEMENT	1,500 C.F.M.(RECOMMENDED MAXIMUM)
CAPACITY FOR FYLASH	1000 C.F.M. (RECOMMENDED MAXIMUM)
DISCHARGE AREA	.67 SQ. FT.
DISCHARGE VELOCITY @1500 C.F.M.	38 FT. / SEC.
DIRECTION OF AIR DISCHARGE	DOWN WARD
DISCHARGE SHAPE	(2) 11/16 X 48" SLOTS (2) 5/8 x 30" SLOTS
OUTLET MOISTURE CONTENT	IDEALLY ZERO
CLEANING MECHANISM	PULSE JET
FREQUENCY OF CLEANING	VARIABLE

CARTRIDGE SPECIFICATIONS

CARTRIDGE DIAMETER	7 7/8" O.D.
CARTRIDGE LENGTH	39 1/4"
CONSTRUCTION	PLEATED
FIBER	SPUN BONDED POLYESTER
WEIGHT	8 OZ / SQ. YD.
PERMEABILITY (.5" WATER)	24 CFM/SQ FT

CEMENT AND FLYASH INTO DUST COLLECTOR

CEMENT & FLYASH SILOS

WEIGHT OF DUST TO BE COLLECTED

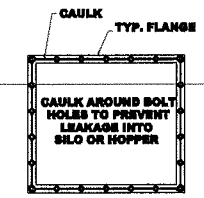
.07 LB/YD^3 ____ YD^3 CONCRETE/HR = ___ LB/HR

WEIGHT OF DUST PER CUBIC FT. OF AIR

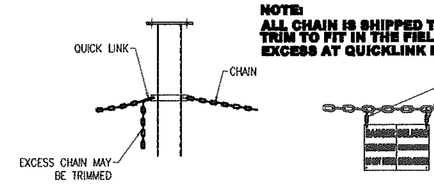
.0185 X 10^{-2} GR HR/LB FT^3 X (___ LB/HR)= ___GR DUST/ FT^3 AIR

DUST OUT OF THE DUST COLLECTOR

MULTIPLY THE ABOVE VALUES FOR DUST INTO DUST COLLECTOR BY .001

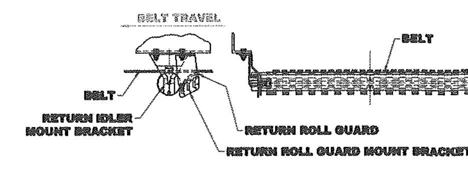


TYP. CAULKING DETAIL



NOTE:
ALL CHAIN IS SHIPPED THE SAME LENGTH. TRIM TO FIT IN THE FIELD OR LEAVE EXCESS AT QUICKLINK END.

TYP. SAFETY SIGN & CHAIN DETAIL

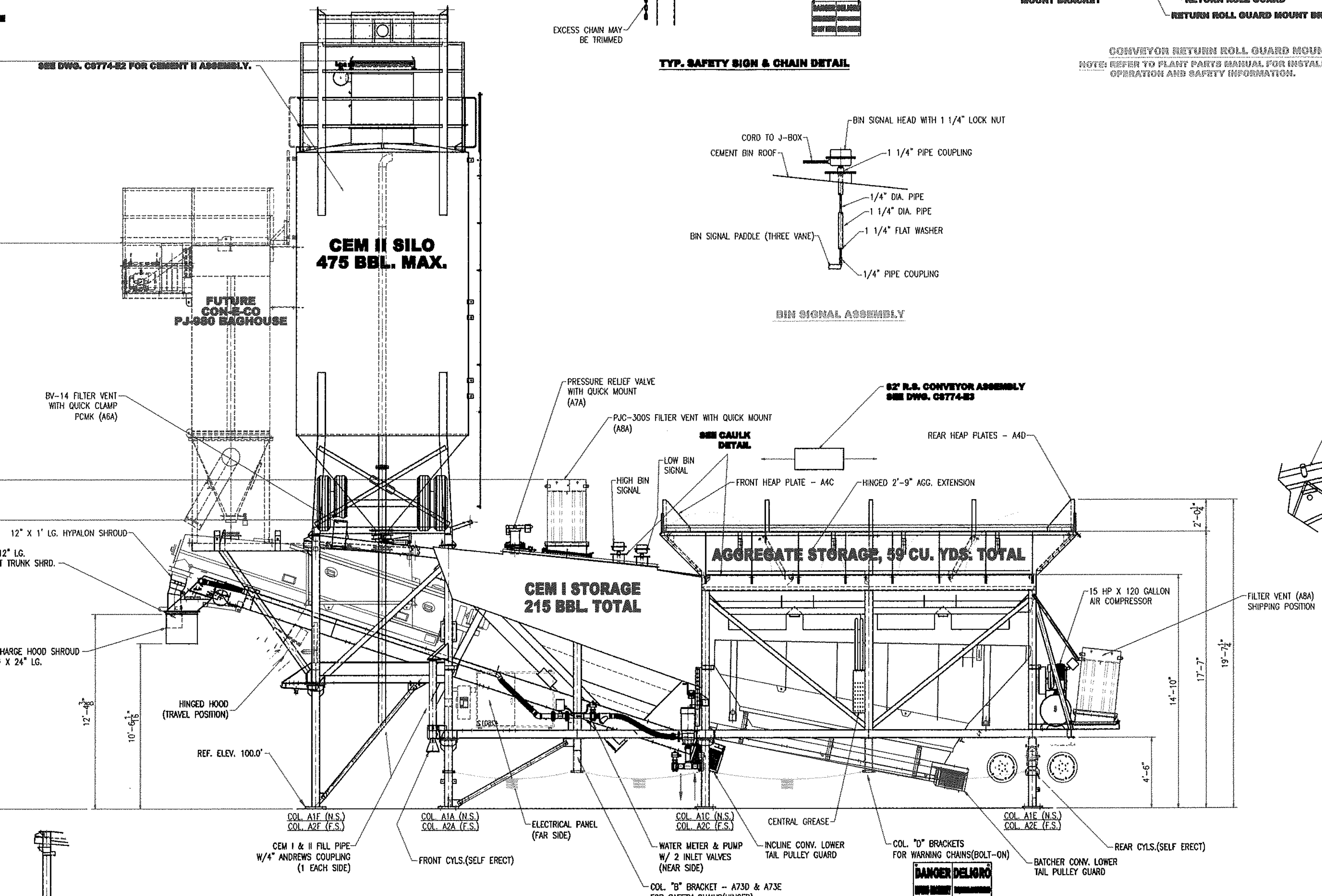


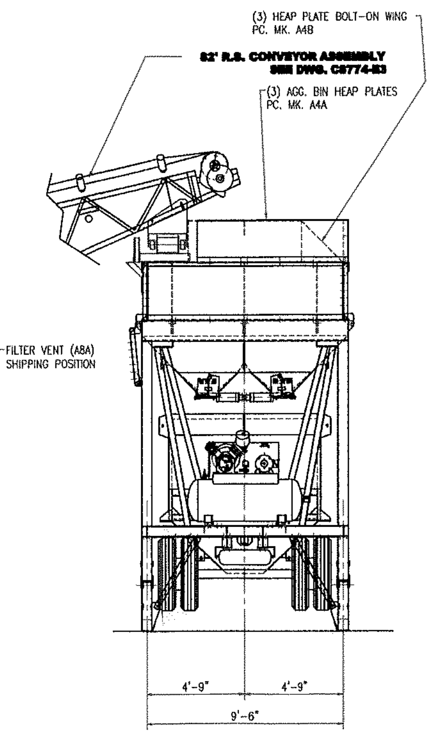
CONVEYOR RETURN ROLL GUARD MOUNT

NOTE: REFER TO PLANT PARTS MANUAL FOR INSTALLATION, OPERATION AND SAFETY INFORMATION.

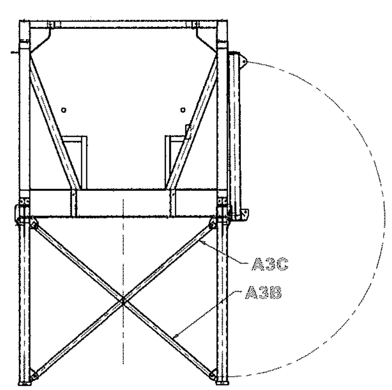
BIN SIGNAL HEAD WITH 1 1/4" LOCK NUT
CORD TO J-BOX
CEMENT BIN ROOF
1 1/4" PIPE COUPLING
1/4" DIA. PIPE
1 1/4" DIA. PIPE
BIN SIGNAL PADDLE (THREE VANE)
1 1/4" FLAT WASHER
1/4" PIPE COUPLING

BIN SIGNAL ASSEMBLY

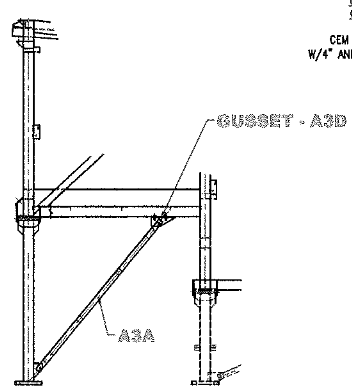




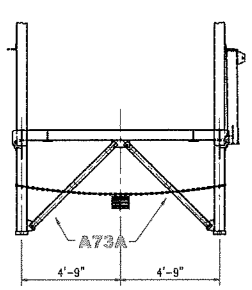
REAR VIEW



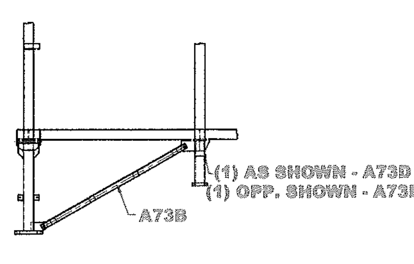
COLUMN LINE "F-F"



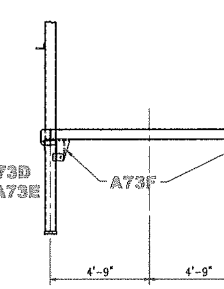
COL. A1F COL. A1A



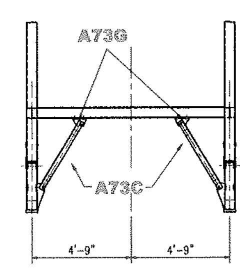
COLUMN LINE "A-A"



COLUMN "A-B"



COLUMN LINE "C-C"



COLUMN LINE "E-E"

* * * LO-PRO 12 (C8774-L) * * *

QUAN	PC-MK	PART DESCRIPTION
1		MOBILE 12 LO-PRO PORTABLE PLANT W/ HINGED & PINNED 2'-9" AGG. EXTENSION, SELF ERECT KIT, TEST WEIGHT HANGERS-(TELESCOPING), & 4'-6" LEGS
2		KEYS FOR ELECTRICAL SERVICE PANEL (WIRED IN MAIN DISCONNECT)
1		INSTRUCTION AND PARTS MANUAL
2 SET		ERECTION DRAWINGS (C8774-E1, E2, & E3)
2 SET		ELECTRICAL DWGS. (C8774-EC1A,B,C,E & EC2)
3	A4A	HEAP PLATES (CENTER SECTION)
3	A4B	HEAP PLATES (END SECTION)
1	A4C	FRONT HEAP PLATES (L-SHAPED)
1	A4D	REAR HEAP PLATES (L-SHAPED)
1	A8A	VENT (MODEL PJC-300S) (W/ QUICK MOUNTS) (SHIPS ON REAR)
1	A7A	PRESSURE RELIEF VALVE, 7" DIA. (W/ QUICK MOUNTS)
1	A6A	BV-14 CEMENT BATCHER VENT (W/ QUICK MOUNTS)
2	A73A	COL. A-A KNEE BRACE ANGLE (DOUBLE ANGLE W/ SPACERS) (L3 X 2 X 1/4 X 68 15/16) (MOUNTED ON PLANT FOR SHIPPING)
2	A73B	COL. A-B KNEE BRACE ANGLE (DOUBLE ANGLE W/ SPACERS) (L3 X 2 X 1/4 X 95 9/16) (MOUNTED ON PLANT FOR SHIPPING)
1	A73D	COL. A-B KNEE BRACE GUSSET (MOUNTED)
1	A73E	COL. A-B KNEE BRACE GUSSET (MOUNTED)
2	A73F	COL. C HAUNCH (MOUNTED)
2	A73C	COL. E-E KNEE BRACE ANGLE (DOUBLE ANGLE W/ SPACERS) (L3 X 2 X 1/4 X 45 5/16) (MOUNTED ON PLANT FOR SHIPPING)
2	A73G	COL. E-E KNEE BRACE GUSSET(MOUNTED)
2	A3A	COL. F-A KNEE BRACE ANGLE (L3 X 2 X 1/4 X 111 7/16") (MOUNTED ON PLANT FOR SHIPPING)
1	A3B	COL. F-F "X"-BRACE ANGLE W/SPACER BAR (L3 X 3 X 1/4 X 137 1/2") (MOUNTED ON PLANT FOR SHIPPING)
1	A3C	COL. F-F "X"-BRACE ANGLE W/O SPACER BAR (L3 X 3 X 1/4 X 137 1/2") (MOUNTED ON PLANT FOR SHIPPING)
2	A3D	COL. F-A ANGLE BRACE GUSSET(MOUNTED)
1	MNTD.	DISCHARGE HOOD(W/SHROUD RING) (HINGED)
1		24" X 24" SHROUD(DISCH. HOOD SHRD. RING)
1		24" ROLLED ROD CLAMP(DISCH. SHROUD)
1		3" CARRAIGE BOLT W/ F.W., (2) NUTS (SHROUD CLAMP)
1		ELEPHANT TRUNK SHROUD, 10"DIA. X 12" LG. (LOWER SHROUD)
1		HOSE CLAMP, 10" DIA. (LOWER SHROUD)
1		HYPALON SHROUD, 12" DIA. X 12" LONG (UPPER SHROUD))
2		HOSE CLAMP, 12" DIA.(UPPER SHRD.)
3 TUBES		CAULKING
2 GAL.		TOUCH-UP PAINT (CASE WHITE)
26		BOLTS, 7/8" DIA. X 2" (A325) W/NUTS (A,C, & F COLUMNS)(TUBE LEGS)
1		BOLT, 1" DIA. X 2 1/2" LG. W/ NUT (A325) ("F" COL. X BRACE CENTER HOLE)
5		BOLTS, 3/8" DIA. X 1 1/2" W/NUTS, L.W. & (2)F.W. (DISCHARGE HOOD)
5		BOLTS, 5/8" DIA. X 1 1/2" W/NUTS, L.W. & (2)F.W. (DISCHARGE HOOD)
26		BOLTS, 5/8" DIA. X 1 1/2" W/NUTS, L.W. & (2)F.W. (AGG. EXTENSION SIDES)
12		PINS 3/4" DIA. X 18" LG. (AGG. EXT. DIVIDERS)
44		BOLTS, 5/8" DIA. X 1 1/2" LG. W/ F.W., L.W., & NUT (HEAP PLATES)
1	MNTD	CEM. LOAD CELL (2000#) COMPLETE W/ INSULATORS, HOOK BOLTS
1	MNTD	AGG. LOAD CELL (2000#) COMPLETE W/ INSULATORS, HOOK BOLTS
1	MNTD.	HIGH BIN SIGNAL
1	MNTD.	LOW BIN SIGNAL
2	MNTD.	LIGHT BAR W/HORN, (2) POSITION
1		LIGHT BULB, 100 WATT (RED)
1		LIGHT BULB, 100 WATT (GREEN)
1	MNTD.	3" INLET 10 HP.-350 GPM. WATER PUMP W/ DUAL INLET VALVES (MOUNTED ON WINCH)
1		15 KVA TRANSFORMER (MOUNTED)
2 ROLLS		1/4" X 1 1/4" FOAM TAPE (CEM I & II FILTER VENTS)

* * * WARNING SIGNS & SAFETY CHAINS * * *

QUAN	PC-MK	PART DESCRIPTION
9		WARNING SIGNS(DANGER, MOVING MACHINERY)
9		4/o X 144" LG. CHAINS(CHAIN TO LOWER COLS.)
27		1/4" QUICKLINKS(SIGNS & CHAINS)
2	MNTD	COL. A1D & A2D WARNING SIGN MOUNTS
1		INCLINE CONVEYOR LOWER TAIL PULLEY GUARD - 30"
1		BATCHER CONVEYOR LOWER TAIL PULLEY GUARD - 30"
10		BOLTS, 1/2" DIA. X 1 1/2" W/NUTS, L.W., & (2) F.W.(LOWER CONV. GUARDS IC & BC)

NOTES:
1.) ALL LEGS SHOULD BE BOLTED TO MAINFRAME OF PLANT AFTER HINGED DOWN INTO POSITION.
2.) ALL ANGLE BRACES ARE PINNED CONNECTIONS TO PLANT AND LEGS USING 1" X 2 3/4" PINS.
3.) SEE OPERATOR'S MANUAL FOR STRUCTURAL BOLT (A325) TIGHTENING SPECIFICATIONS.

NOTES:
1.) SEE DWG. C8774-F1 IN SITE PREP MANUAL FOR PLANT FOUNDATION LAYOUT.
2.) SEE DWG. C8774-E1 FOR PLANT ASSEMBLY.
6.) SEE DWG. C8774-E2 FOR CEM. II LADDER, CAGE & HANDRAIL ASSEMBLY.
8.) SEE DWG. C8774-E3 FOR BIN CHARGING CONVEYOR ASSEMBLY.
11.) SEE DWG. 0700-34K FOR HIGH PRESSURE AIR ASSEMBLY.
12.) SEE DWG. 0700-29 FOR LOW PRESSURE AIR ASSEMBLY.
13.) SEE DWG. 1200-47B FOR HYDRAULIC PLUMBING ASSEMBLY.
14.) SEE DWG. 0215-M1 & 0215-M2B FOR BIN CHARGING CONVEYOR MACHINERY.
15.) SEE OPERATOR'S MANUAL FOR STRUCTURAL BOLT (A325) TIGHTENING SPECIFICATIONS.

				5	
				4	
				3	
				2	
				1	
NEXT ASSY	ECO NO.	DATE	APPR	NO.	REVISION

SCALE 1/4"=1'-0"
DATE 4/5/06
DRAWN CMN
CHECKED

TITLE MOBILE LP-12 PLANT ASSY.
CUSTOMER KONCRETE INDUSTRIES
LOCATION WALLA WALLA, WA

CON-E-CO
An Oshkosh Truck Corporation Company
concrete equipment company
237 N. 13th St. Blair, NE 68008
phone 402-426-4181

PART NO. *C8774-L
JOB NO. C8774-L
DWG.NO C8774-E1

Romero General Construction Corp.

2150 NORTH CENTRE CITY PARKWAY, SUITE I
ESCONDIDO, CA 92026
PHONE (760) 489-8412 FAX (760) 489-1460

FACSIMILE TRANSMITTAL SHEET

DATE: 7-27-07

CO.:

FROM: Marc Nelson

ATTEN: Dale Pettibone

RE: Air Quality

FAX NO.: ( )

NUMBER OF PAGES INCLUDING COVER:

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

WISPER
Q WATT
80
50 yd
slab
1 X 50
30
20
12-15

PLEASE CALL (760) 489-4075 IF NOT ALL PAGES WERE RECEIVED. THANK YOU.

CON-E-CO
An Oshkosh Truck Corporation Company
QUALITY•PERFORMANCE•SERVICE

CONCRETE EQUIPMENT COMPANY
237 NORTH 13TH STREET
P.O. BOX 430
BLAIR, NEBRASKA 68008

(402) 426-4181 FAX: (402) 426.4180

Sales Order

SALES ORDER #	DATE ORDER RECEIVED:
55263 GT/DS	06/20/2005

Sold To:	Ship To:
Mr.David Konen KONCRETE INDUSTRIES, INC PO BOX 991 WALLA WALLA WA Cell: 509.520.1414 **Phone:** 509.525.9143 **Fax:** 509.525.4031	502 N 13TH ST **Phone:** **Fax:**

CUSTOMER ORDER #	DOWN PAYMENT:	SERIAL NUMBER:	FREIGHT:
	INVOICE	C – 8774	PREPAID

SCHEDULED COMPLETION DATEWEEK OF:	DESCRIPTION:
05/30/05	LP12, WM, EZ CAL

DETAIL DESCRIPTION

"LO-PRO" 12 CONCRETE BATCH PLANT

"NATIONAL READY MIX CONCRETE ASSOCIATION (NRMCA) ENDORSES THE MEMBERS OF THE CONCRETE PLANT MANUFACTURERS BUREAU (CPMB) AS THE PREFERRED PROVIDER OF CONCRETE PLANTS AND ASSOCIATED EQUIPMENT AS PROVIDING QUALITY EQUIPMENT CONFORMING TO THE STANDARDS AND SPECIFICATIONS OF NRMCA'S PLANT CERTIFICATION PROGRAM AND THE CONCRETE PLANT MANUFACTURERS STANDARDS"

CONSTRUCTION:

- RIGHT HAND CONFIGURATION
- STRUCTURE DESIGNED TO HOLD UBC 97, NON-SEISMIC LOADS, 90 MPH

FASTEST MILE WIND, ANY CODE OTHER THAN UBC WILL BE SUBJECT TO NEW PRICING

AGGREGATE STORAGE BIN WITH THE FOLLOWING SPECIFICATIONS:

- 59 CUBIC YARD X TWO (2) COMPARTMENT AGGREGATE BIN
- EIGHT (8) FILL GATES EACH WITH 4 1/2" DIAMETER AIR CYLINDERS AND QUICK DUMP VALVE - GATES OPERATED WITH 1/2" SINGLE SOLENOID VALVE
- SINGLE POINT AGGREGATE GATE LUBRICATION FURNISHED FOR MANUALLY OPERATED PUMP GREASE GUN
- EQUAL IN LINE COMPARTMENTS
- "ALKON" PROBE IN EACH BIN
- HINGED AND PINNED AGGREGATE BIN

AGGREGATE BATCHER WITH THE FOLLOWING SPECIFICATIONS:

- 12 CUBIC YARD CAPACITY
- AGGREGATE BATCHER CAPACITIES SIX (6) OF EIGHT (8) GATES
- MAIN LEVERS AND SINGLE LOAD CELL LESS DIGITAL READOUT
- REAR MOUNTED AIR VIBRATOR
- TELESCOPING SCALE WEIGHT HANGERS
- 30" X 10 H.P. BATCHER CONVEYOR
- VARIABLE SPEED BATCHER CONVEYOR
- DISCHARGE STOP / FEED INTERLOCK

MIXER CHARGING CONVEYOR WITH THE FOLLOWING SPECIFICATIONS:

- 30" X 35 DEGREE IDLERS X 10 H.P. MIXER CHARGING CONVEYOR

CEMENT I STORAGE BIN WITH THE FOLLOWING SPECIFICATIONS:

- 215 BBL IN TRUSS CEMENT I STORAGE BIN - TOTAL STORAGE 860 CUBIC FEET (MAXIMUM 215 BBL - MINIMUM 179 BBL)
- MANHOLE WITH INSIDE LADDER
- TWO (2) - 5" DIAMETER FILL PIPE SYSTEMS EACH WITH 4" COUPLING - LOCATE ONE (1) PER SIDE
- MODEL PJC-300S SILO DUST CONTROL SYSTEM
  - 8 EACH FILTER CARTRIDGES – 8" DIAMETER 40" LONG
  - 304 SQUARE FEET CLEANING AREA

- HIGH PRESSURE AIR – PULSE JET CLEANING SYSTEM
- 1,520 C.F.M. CAPACITY
- ALL WELDED STEEL ENCLOSURE
- 7" DIAMETER WEIGHED PRESSURE RELIEF VALVE

- HIGH BIN SIGNAL
- LOW BIN SIGNAL
- EXTERIOR MOUNTED LIGHTS AND HORN
- ONE (1) 12" DIAMETER X 20 H.P. X 16'-6" LONG SCREW CONVEYOR
  - THEORETICAL CAPACITY - 132 CUBIC FEET PER MINUTE
  - 12 3/4" DIAMETER HOUSING WITH 12" DIAMETER FLIGHTING - 2/3 PITCH AT INLET WITH BALANCE FULL PITCH
  - GEAR REDUCER DRIVE
- ONE (1) - 9" DIAMETER X 15 H.P. X 16'-6" LONG SCREW CONVEYOR
  - THEORETICAL CAPACITY - 54 CUBIC FEET PER MINUTE
  - 10" DIAMETER HOUSING WITH 9" DIAMETER FLIGHTING - 2/3 PITCH AT INLET WITH BALANCE FULL PITCH
  - DIRECT DRIVE WITH GUARDED V-BELT REDUCTION

CEMENT BATCHER WITH THE FOLLOWING SPECIFICATIONS:

- 12 CUBIC YARD CAPACITY
- MAIN LEVERS AND SINGLE LOAD CELL LESS DIGITAL READOUT
- 14" DIAMETER X 15 H.P. BATCHER SCREW
- 12" DIAMETER BUTTERFLY TYPE DISCHARGE VALVE WITH 3" DIAMETER AIR CYLINDER AND 3/8" DOUBLE SOLENOID "INCHING" VALVE
- BV-14 BATCHER DUST CONTROL SYSTEM
  - 14 EACH FILTER BAGS – 4" DIAMETER 16" LONG
  - 20 SQUARE FEET CLEANING AREA
  - ATMOSPHERE PRESSURE CLEANING SYSTEM
- TWO (2) VIBRATORS
- DISCHARGE CLOSED / FEED INTERLOCK

HIGH PRESSURE AIR SYSTEM WITH THE FOLLOWING SPECIFICATIONS:

- 10 H.P. X 120 GALLON AIR COMPRESSOR
- ALL PIPING TO INCLUDE REGULATOR, FILTER AND LUBRICATORS
- SOLENOID VALVES MOUNTED ON MANIFOLDS

- AIR "LOCK-OUT" FURNISHED AT COMPRESSOR TANK

LOW PRESSURE AIR SYSTEM WITH THE FOLLOWING SPECIFICATIONS:

- 5 H.P. LOW PRESSURE HIGH VOLUME CEMENT AERATION BLOWER
- EIGHTEEN (18) CEMENT I AERATION PADS AND MANIFOLD
- EIGHT (8) CEMENT II AERATION PADS AND MANIFOLD

WATER SYSTEM WITH THE FOLLOWING SPECIFICATIONS:

- 350 GPM X 10 H.P. WATER PUMP
- 515-3" WATER METER WITH 3" STRAINER AND 3" PIPING
- TWO (2) 3" FEED VALVES
- SEVEN (7) ADMIXTURE COUPLINGS

ELECTRICAL SYSTEM WITH THE FOLLOWING SPECIFICATIONS:

- 460 VOLT
- MAIN DISCONNECT WITH CIRCUIT BREAKER
- ALL MOTOR CONTROLS PROTECTED WITH CIRCUIT BREAKER
- NEMA 12 ENCLOSURES
- U.L. LISTED PANELS
- 15 KVA TRANSFORMER AND DUPLEX RECEPTACLE MOUNTED ON SERVICE PANEL
- WIRING AND CONDUIT FOR FUTURE PJ-980 15 H.P. DUST COLLECTOR
- PLUG IN CONNECTION WITH SUBFEED FOR FUTURE 25HP RAIL STACKER, SHIP MATING CONNECTOR LOOSE

TRANSPORTATION SYSTEM WITH THE FOLLOWING SPECIFICATIONS:

- TANDEM AXLE
- BUDD WHEELS
- EXTENDED HEIGHT MOBILE PACKAGE INCLUDING THE FOLLOWING:
  - SELF ERECT HYDRAULICS WITH FOUR CYLINDERS AND GAS ENGINE
  - HINGED DISCHARGE HOOD
  - CEMENT I BIN DUST CONTROL QUICK RELEASE CLAMPS
  - BATCHER DUST CONTROL QUICK RELEASE CLAMPS
  - HINGED LOWER SUPPORT COLUMNS

- PJC-300S BRACKET IN REAR OF PLANT
- PJ-980 MOBILE STYLE SUPPORTS

120 yd^3/hr

BATCHING CONTROLS WITH THE FOLLOWING SPECIFICATIONS:

- "COMMAND ALKON" 2000 EZ-CAL COMPUTERIZED BATCH CONTROL
- ORDER ENTRY SYSTEM
- 4 AGGREGATES
- 3 CEMENTS
- 2 METERED WATERS
- 6 ADMIXES
- REMOTE DIAGNOSTICS
- FAST BATCH
- "COMMAND ALKON" FACTORY START-UP
- 75'-0" CONTROL AND SCALE CABLES

START UP ASSISTANCE:

- UP TO THREE (3) DAY START UP ASSISTANCE BY "CON-E-CO" FIELD SERVICE TECHNICIAN
- BATCH PLANT MUST BE READY TO BEGIN PRODUCING CONCRETE
- SCALES CALIBRATED
- REQUIRED WATER SERVICE
- REQUIRED ELECTRICAL SERVICE
- MATERIAL IN AGGREGATE BIN
- MATERIAL IN SILOS
- BATCHING CONTROL INSTALLED WITH PLANT

PAINT:

- COLOR: CASE WHITE

CON-E-CO
CONCRETE EQUIPMENT COMPANY

SPECIFICATIONS FOR MODEL 30-250 SILO DUST CONTROL

MODEL 30-250 SPECIFICATIONS

TOTAL CLOTH AREA		250 SQ. FT.
NUMBER OF BAGS		30
HOUSING WIDTH & LENGTH		2'-7" X 3'-0"
CAPACITY FOR CEMENT		1500 SCFM (Recommended Maximum)
CAPACITY FOR FLYASH		1000 SCFM (Recommended Maximum)
BAG CLEANING METHOD		HIGH FREQUENCY AIR VIBRATOR
CLEANING INTERVAL		30 TONS OF MATERIAL (1 LOAD) OR EVERY 15 MIN FOR 3 MIN
MAXIMUM OPERATING TEMPERATURE		275 DEGREES F
CAPACITY FOR HYDRATED LIME		1000 SCFM (Recommended Maximum)
DISCHARGE SHAPE		(2) 2" X 36" SLOTS
NORMAL OPERATING TEMP & PRESSURE		AMBIENT
DISCHARGE AREA		1 FT^2 (144 IN^2)
CFM/FT^2 THROUGH BAGS	6-(CEMENT)	4-(FLYASH & HYDRATED LIME)
AIRSPEED OUT OF DEVICE	1500 FT / MIN	(CEMENT) (@ 3 TRUCKS UNLOADING)
DIRECTION OF AIR DISCHARGE	DOWN	(W/O BLOWER)

BAG SPECIFICATIONS

BAG DIAMETER	5"
BAG LENGTH	77"
CONSTRUCTION	SEAMLESS
FIBER	WOVEN POLYESTER
FINISH	HEAT SET
WEIGHT	8.5 +- 0.5 OZ./SQ. YD.
THICKNESS	0.022"
MULLEN BURST	275 PSI (Min)
PERMEABILITY RANGE (0.5" WATER)	30-55 CFM/SQ. FT.
BAG EFFICIENCY	99.9% (*)
NEBRASKA APPROVED SYSTEM EFFICIENCY	PM10 : 95% (**)
	PM 98% (**)

SILO VENT (***)	INTO BAGS
LB / HR	.07 LB/YD^3 (YD^3/HR) - SUM OF ALL VENTS ***
GR / FT^3	2.18 (CFM INCREASES WITH YD^3/HR)

OUT OF BAGS

FOR VACUUM SYSTEMS OUT OF BAGS VALUES, MULTIPLY THE INTO BAGS VALUES BY .031.

FOR SEALED CEMENT SILOS, MULTIPLY THE INTO BAGS VALUES BY 0.001.

* BASED ON TESTS BY THE UNIVERSITY OF TENNESSEE.
** APPROVED WITHOUT INDIVIDUAL SITE STACK TESTS.
***VALUES ARE TOTALS FOR ALL CEMENT LOADING BAG COLLECTORS. DIVIDE UP ACCORDINGLY.

QUALITY ■ PERFORMANCE ■ SERVICE
297 N. 13TH STREET ■ P.O. BOX 490 ■ BLAIR, NE 68008
(402) 426-4181 ■ OFFICE FAX (402) 426-4180 ■ ENGINEERING FAX (402) 426-4190
E-MAIL: sales@con-e-co.com ■ WEBSITE: www.con-e-co.com

CON-E-CO
CONCRETE EQUIPMENT COMPANY

SPECIFICATIONS FOR MODEL 14-23 CEMENT BATCHER VENT

MODEL 14-23 SPECIFICATIONS	
TOTAL CLOTH AREA	23 SQ. FT.
NUMBER OF BAGS	14
HOUSING HEIGHT (WITH BLOWER)	1'-10"
HOUSING WIDTH & LENGTH	0'-10" X 2'-11"
BAG CLEANING METHOD	REVERSE AIR FLOW (From batcher filling and emptying)
MAXIMUM OPERATING TEMPERATURE	170 DEGREES F
CAPACITY	160 CFM MAXIMUM
DISCHARGE SHAPE	(2) 2" X 12" SLOTS
CFM/FT^2 THROUGH BAGS	7.83 MAXIMUM
AIRSPEED OUT OF DEVICE	545 FT / MIN
DIRECTION OF AIR DISCHARGE	DOWN
DISCHARGE AREA	.33 FT^2 (48 IN^2)
NORMAL OPERATING TEMP & PRESSURE	AMBIENT

BAG SPECIFICATIONS	
BAG DIAMETER	4-1/2" DIA.
BAG LENGTH	16'
CONSTRUCTION	3 X 1 TWILL
FIBER	POLYESTER
FINISH	GREIGE
WEIGHT	7.1 OZ./SQ. YD.
THICKNESS	0.019"
MULLEN BURST	275 PSI (Min)
PERMEABILITY RANGE (0.5" WATER)	30-55 CFM/SQ. FT.
BAG EFFICIENCY	99.9% (*)

BATCHER VENT	INTO BAGS
LB / HR	(.04 LB / YD^3) * (___YD^3 HR)
GR / FT^3	(.648 GR HR / LB FT^3) * (___LB / HR)

OUT OF BAGS
FOR ALL OUT OF BAGS VALUES, MULTIPLY THE INTO BAGS VALUES BY 0.001.

* BASED ON TESTS BY THE UNIVERSITY OF TENNESSEE.

QUALITY ■ PERFORMANCE ■ SERVICE
237 N. 13TH STREET ■ P.O. BOX 430 ■ BLAIR, NE 68008
(402) 426-4181 ■ OFFICE FAX (402) 426-4180 ■ ENGINEERING FAX (402) 426-4190
E-MAIL: sales@con-e-co.com ■ WEBSITE: www.con-e-co.com

CON-E-CO
CONCRETE EQUIPMENT COMPANY

BV Series Batcher Vent MAINTENANCE & OPERATION

OPERATION

The CON-E-CO BV Series Batcher Vents are designed for efficient operation and cleaning. The contaminated air enters the dust collector through its bottom flanged opening at the top of the weigh batcher. In the weigh batcher, many of the heavy dust particles settle out of the air stream due to a reduction of air velocity. From the weigh batcher, the dust laden air flows up through the inside of the filter bags where the dust particles are trapped by the filter bags thus allowing the clean air to pass through the bags into the clean air chamber. From there, the air flows through the exhaust opening and into the atmosphere.

BAG CLEANING

A vacuum is created inside the weigh batcher as the batcher is emptied. This vacuum reverses the air through the bags and pulls collected material from the bags back down inside the weigh batcher.

Examine the bags each week to check for excessive build up on the inside of the bags. The best efficiency and longest bag life is obtained by cleaning the bags as often as necessary. A thin even coating of material should coat the inside of the filter bags for the most effective filtration. The dust cakes on the inside of the bags to help filter the fine particles; so if bags are cleaned too often, part of their cleaning efficiency is lost.

MAINTENANCE

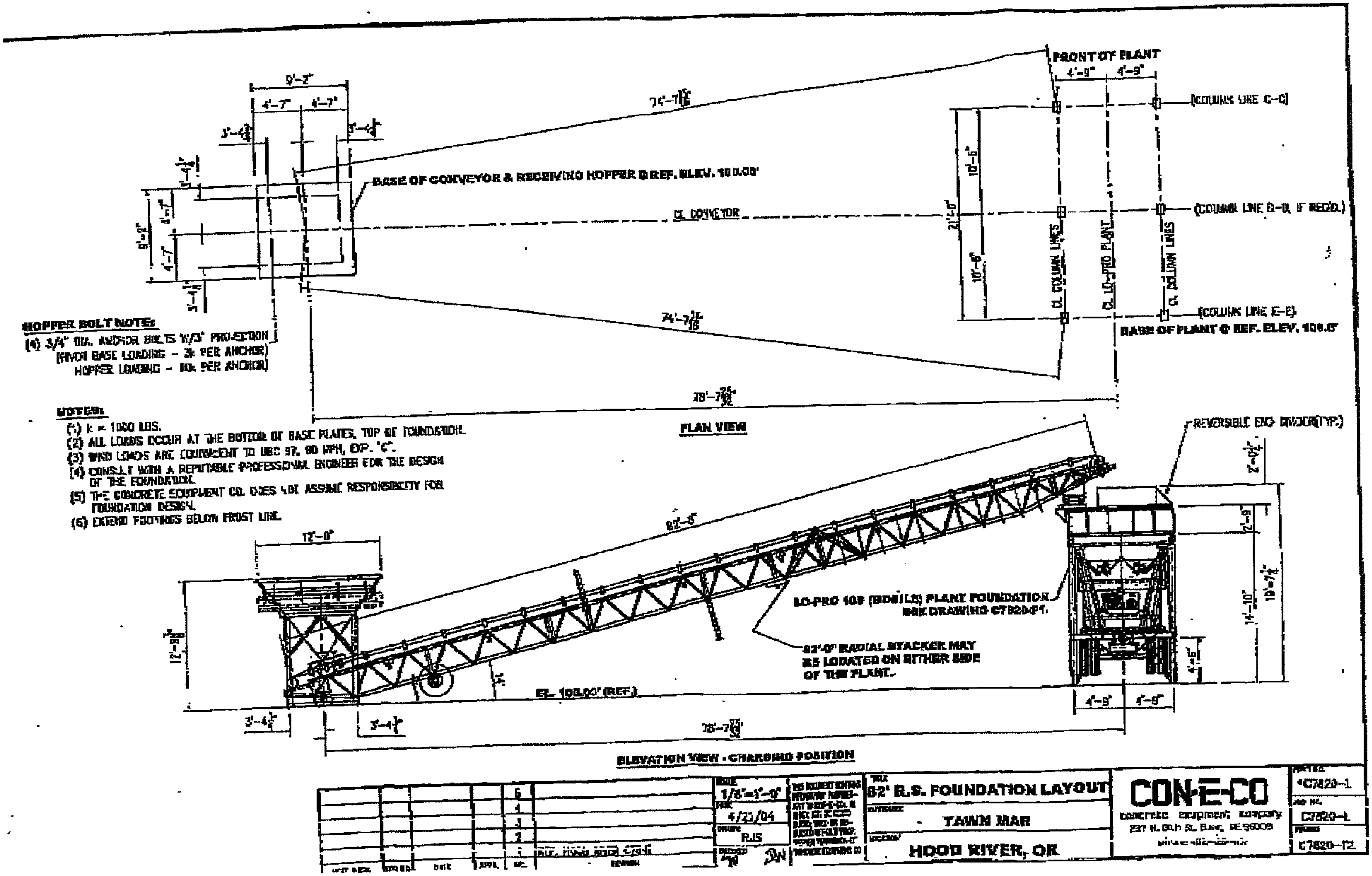
The filter bags can be removed and inspected for tears and thin places. Laundering, mending or repair of the seamless bags is not recommended. The bags are made of seamless woven polyester fabric and if laundered shrinking may take place. Replacement bags are available from CON-E-CO.

SPARE PARTS

Parts should be ordered from Manufacturer to insure compatibility. If parts are needed, obtain serial number from the name plate and call the factory. A complete detailed record of the vent is on file at CON-E-CO.

SAFETY INFORMATION

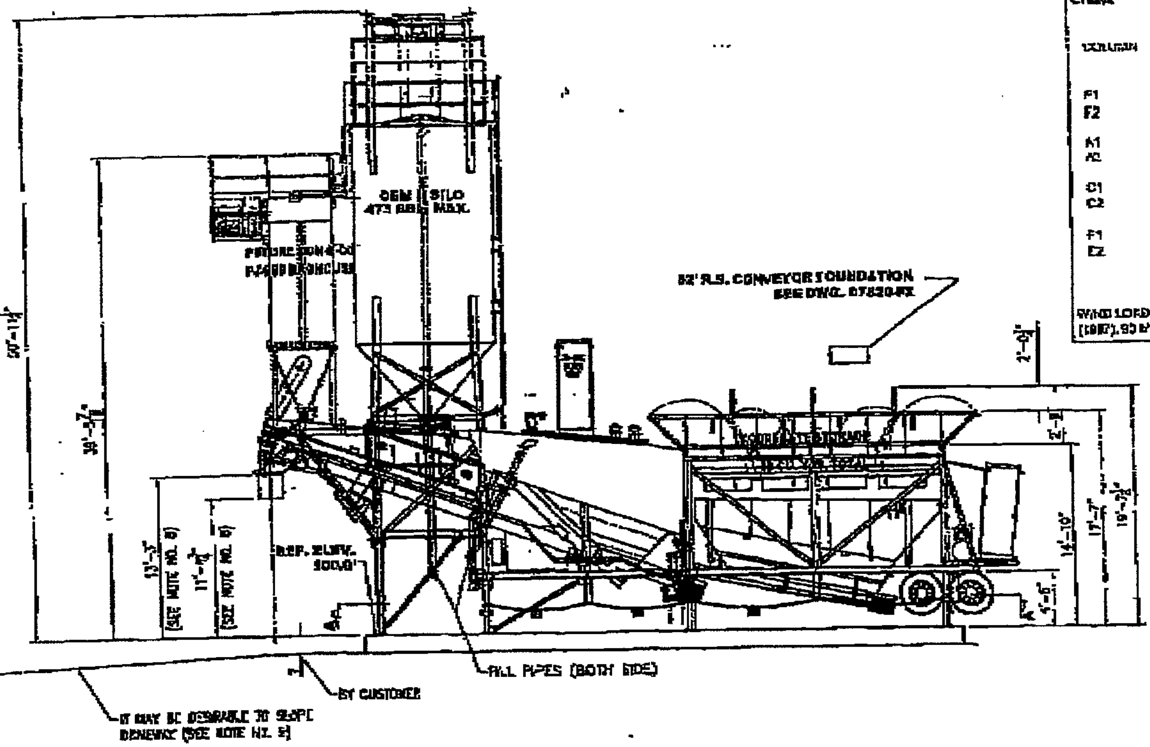
This CON-E-CO dust collector, like other industrial equipment, must be operated and maintained in accordance with our instructions and sound engineering practices. The user of this equipment must always be aware of the physical and chemical properties of the dust particles being collected. Materials or processes presenting such hazards must be identified by the user.


FRONT OF PLANT
BASE OF CONVEYOR & RECEIVING HOPPER @ REF. ELEV. 100.00'
CL CONVEYOR
(COLUMN LINE C-C)
(COLUMN LINE D-D, IF REQ'D.)
(COLUMN LINE E-E)
CL COLUMN LINES
CL LO-PRO PLANT
BASE OF PLANT @ REF. ELEV. 100.0'
HOPPER BOLT NOTE:
(4) 3/4" DIA. ANCHOR BOLTS W/3" PROJECTION
(FROM BASE LOADING - 3k PER ANCHOR)
HOPPER LOADING - 10k PER ANCHOR)
NOTES:
(1) k = 1000 LBS.
(2) ALL LOADS OCCUR AT THE BOTTOM OF BASE PLATES, TOP OF FOUNDATION.
(3) WIND LOADS ARE EQUIVALENT TO UBC 97, 90 MPH, EXP. "C".
(4) CONSULT WITH A REPUTABLE PROFESSIONAL ENGINEER FOR THE DESIGN OF THE FOUNDATION.
(5) THE CONCRETE EQUIPMENT CO. DOES NOT ASSUME RESPONSIBILITY FOR FOUNDATION DESIGN.
(6) EXTEND FOOTINGS BELOW FROST LINE.
PLAN VIEW
REVERSIBLE END DIVIDER(TYP.)
LO-PRO 108 (BIDBILS) PLANT FOUNDATION. SEE DRAWING C7820-P1.
82'-0" RADIAL STACKER MAY BE LOCATED ON EITHER SIDE OF THE PLANT.
EL. 100.00' (REF.)
ELEVATION VIEW - CHARGING POSITION
82' R.S. FOUNDATION LAYOUT
TAWN MAR
HOOD RIVER, OR
1/8"=1'-0"
4/21/04
RJS
CON-E-CO
concrete equipment company
C7820-1
C7820-L
C7820-T2

COLUMN	INDIVIDUAL LOADS DEAD "D"	LIVE "L"	VERT WIND "W"	FOUNDATION LOADS SUMMARY BEARING D+L+W	UPLOAD WIND W-D	HORIZ WIND
F1	17.1	67.9	49.1	134.1	32.0	14.7
F2	17.1	67.9	49.1	134.1	32.0	14.7
A1	4.3	61.8	29.6	65.4	24.7	10.8
A2	4.3	61.8	29.6	65.4	24.7	10.8
C1	9.0	85.2	21.5	125.6	12.5	6.5
C2	9.0	85.2	21.5	125.6	12.5	6.5
E1	7.5	64.7	18.5	93.4	11.2	7.8
E2	7.5	64.7	18.5	93.4	11.2	7.8

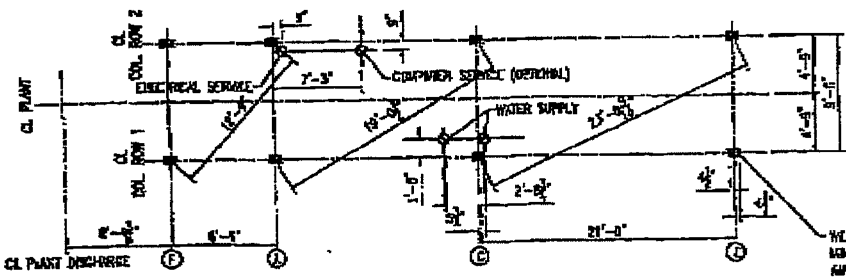
THE VALUES SHOWN ABOVE ARE IN KIPS, 1000 LB FORCE

WIND LOADS ARE CALCULATED ACCORDING TO UNIFORM BUILDING CODE (1997), 90 MPH, EXPOSURE "C"



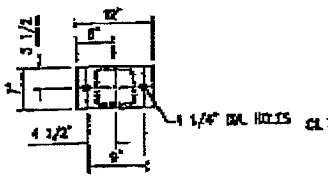
NOTES:

(1) k = 1000 LBS.
(2) ALL LOADS OCCUR AT THE BOTTOM OF BASE PLATES, TOP OF FOUNDATION.
(3) WIND LOADS ARE BASED ON UBC 97, 90 MPH, EXP. "C".
(4) CONSULT WITH A REPUTABLE PROFESSIONAL ENGINEER FOR THE DESIGN OF THE FOUNDATION.
(5) THE CONCRETE EQUIPMENT CO DOES NOT ASSUME RESPONSIBILITY FOR FOUNDATION DESIGN.
(6) IMPORTANT: IF INSTALLING PLANT IS A PERMANENT LOCATION IT MAY BE DESIRABLE TO DESIGN FOUNDATION FOR FUTURE ADD ON STORAGE MODULES. CONSULT FACTORY FOR REVISED FOUNDATION LOADINGS.
(7) EXTEND FOOTINGS BELOW FROST LINE.
(8) BE SURE TO CHECK TRUCK HEIGHT BEFORE POURING DRIVEWAY AT ELEVATION 100.0'. CONVEYOR DISCHARGE HOOD GIVES 13'-3" CLEARANCE TO LOWEST POINT (STEEL) AND 11'-4 3/4" CLEARANCE TO BOTTOM OF DISCHARGE SHROUD WITH BASE OF PLANT AT EL. 100.0'.
(9) IT MAY BE DESIRABLE TO SLOPE MIXER TRUCK RAMP 18" PER TRUCK LENGTH FOR EASIER MIXER TRUCK CHARGING.
(10) THIS PLANT IS NOT DESIGNED FOR EARTHQUAKE LOADS.



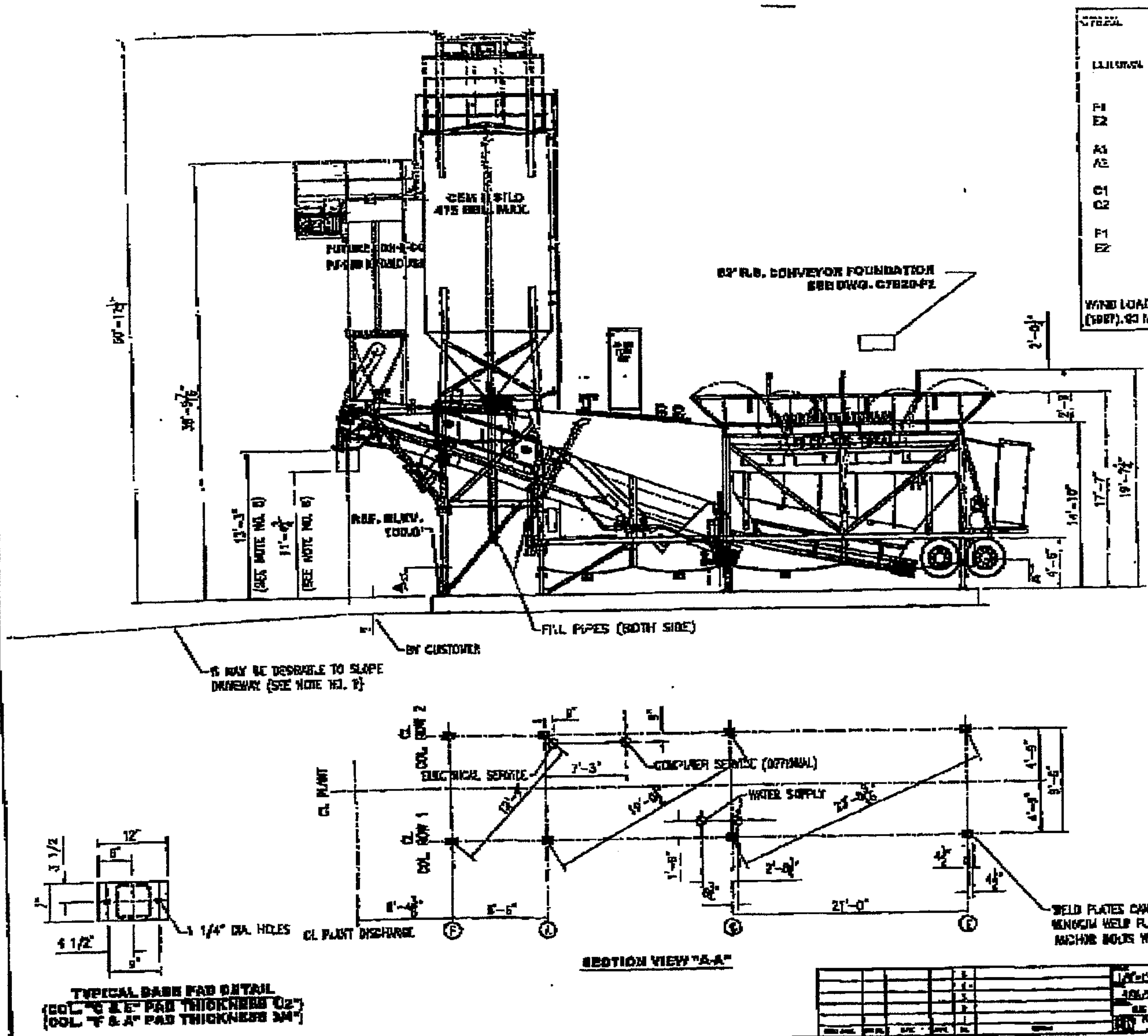
WELD PLATES CAN BE USED IN PLACE OF ANCHOR BOLTS
MINIMUM WELD PLATE SIZE SHOULD BE 16" x 16" (PLATES BY OTHERS)
ANCHOR BOLTS WITH 3" PROJECTION MUST HOLD LOADS (ANCHOR BOLTS BY OTHERS)

SECTION VIEW "A-A"



TYPICAL BASE PAD DETAIL
(COL. "C & E" PAD THICKNESS 1/2")
(COL. "F & A" PAD THICKNESS 3/4")

CON-E-CO
KEVIN MAR
HOOD RIVER, OR



FOUNDATION LOADS SUMMARY

COLUMN	DEAD "D"	LIVE "L"	VERT SEIS "E"	DOWNLOAD SUMMARY D+L+W	UPLOAD WIND W-D	HORIZ WIND
F1	17.5	57.5	43.1	134.1	32.0	14.7
E2	17.1	57.9	49.1	134.1	32.0	14.7
A1	4.5	61.8	28.0	[illegible]	24.7	10.6
A2	4.5	61.8	29.0	85.1	24.7	10.6
C1	8.0	95.2	21.5	125.6	12.5	8.5
C2	8.0	95.2	21.5	125.6	12.0	8.5
F1	7.5	64.7	18.6	83.4	11.2	7.6
E2	7.5	64.7	18.5	83.4	11.2	7.6

THE VALUES SHOWN ABOVE ARE IN KIPS, 1000 LB FORCE

WIND LOADS ARE CALCULATED ACCORDING TO UNIFORM BUILDING CODE (1997), 80 MPH, EXPOSURE 'C'

NOTES:

(1) k = 1000 LBS.

(2) ALL LOADS OCCUR AT THE BOTTOM OF BASE PLATES, TOP OF FOUNDATION.

(3) WIND LOADS ARE BASED ON UBC 97, 80 MPH, EXP. "C".

(4) CONSULT WITH A REPUTABLE PROFESSIONAL ENGINEER FOR THE DESIGN OF THE FOUNDATION.

(5) THE CONCRETE EQUIPMENT CO DOES NOT ASSUME RESPONSIBILITY FOR FOUNDATION DESIGN.

(6) IMPORTANT: IF INSTALLING PLANT IS A PERMANENT LOCATION IT MAY BE DESIRABLE TO DESIGN FOUNDATION FOR FUTURE ADD ON STORAGE MODULES. CONSULT FACTORY FOR REVISED FOUNDATION LOADINGS.

(7) EXTEND FOOTINGS BELOW FROST LINE.

(8) BE SURE TO CHECK TRUCK HEIGHT BEFORE POURING DRIVEWAY AT ELEVATION 100.0'. CONVEYOR DISCHARGE HOOD GIVES 13'-3" CLEARANCE TO LOWEST POINT (STEEL) AND 11'-4 3/4" CLEARANCE TO BOTTOM OF DISCHARGE SHROUD WITH BASE OF PLANT AT EL. 100.0'.

(9) IT MAY BE DESIRABLE TO SLOPE MIXER TRUCK RAMP 18" PER TRUCK LENGTH FOR EASIER MIXER TRUCK CHARGING.

(10) THIS PLANT IS NOT DESIGNED FOR EARTHQUAKE LOADS.

ELECTRICAL REQUIREMENTS

Printed 4/21/2004
12:41 PM

AUX. CHARGING CONVEYORS

	HP	FLA	CB	Str	Heater	Wire Size Min	Wire Size Normal
1.5 KVA Transformer		3.3					
Conveyor 1	25.00	31.0	70	#2	B56	8	8
Traversing Drive	2.00	2.7	15	#00	B4.15	14	12
Total Connected	27.00	36.98					
+25% of Largest Motor	25.00	7.75				Actual	
Running Design Load		44.71	Running Design			35.62	KVA
+5 x Largest Motor		155.00					
Starting Design Load		199.71	Starting Design			159.11	KVA

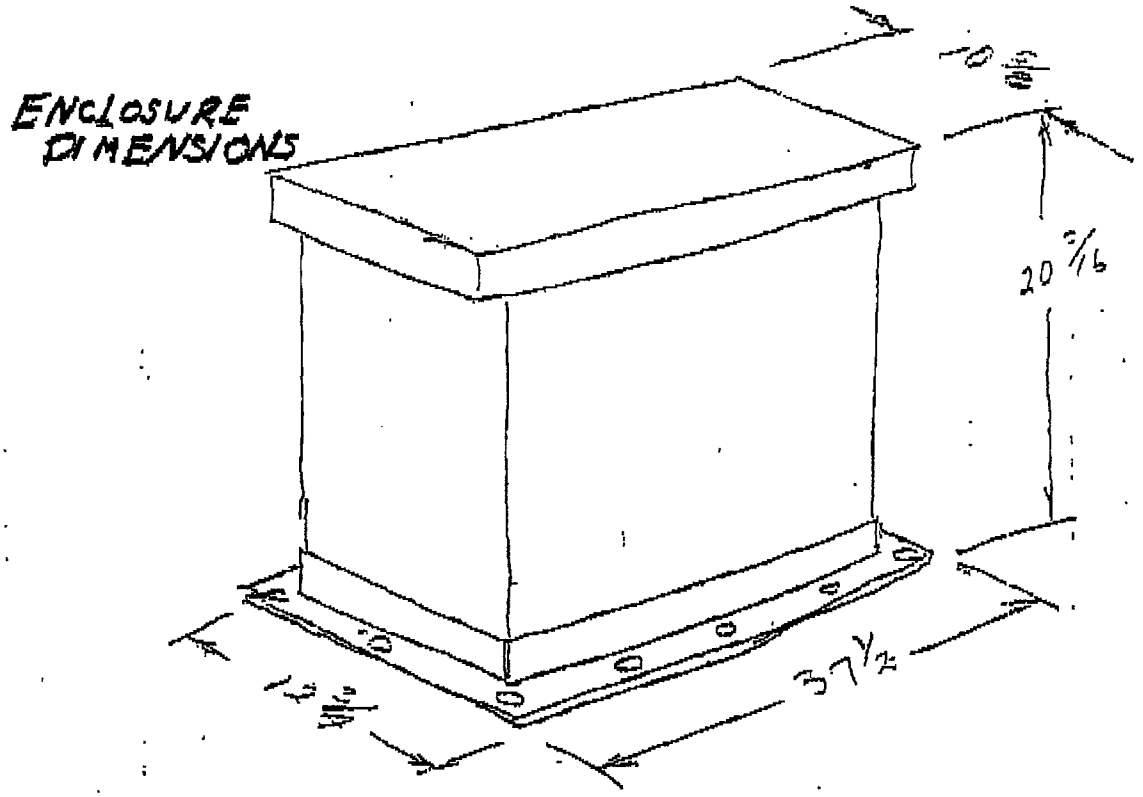
75 KVA Transf. Volt Drop=	7.74%	Starting, and	1.73%	when running.
112.5 KVA Transf. Volt Drop=	5.16%	Starting, and	1.16%	when running.

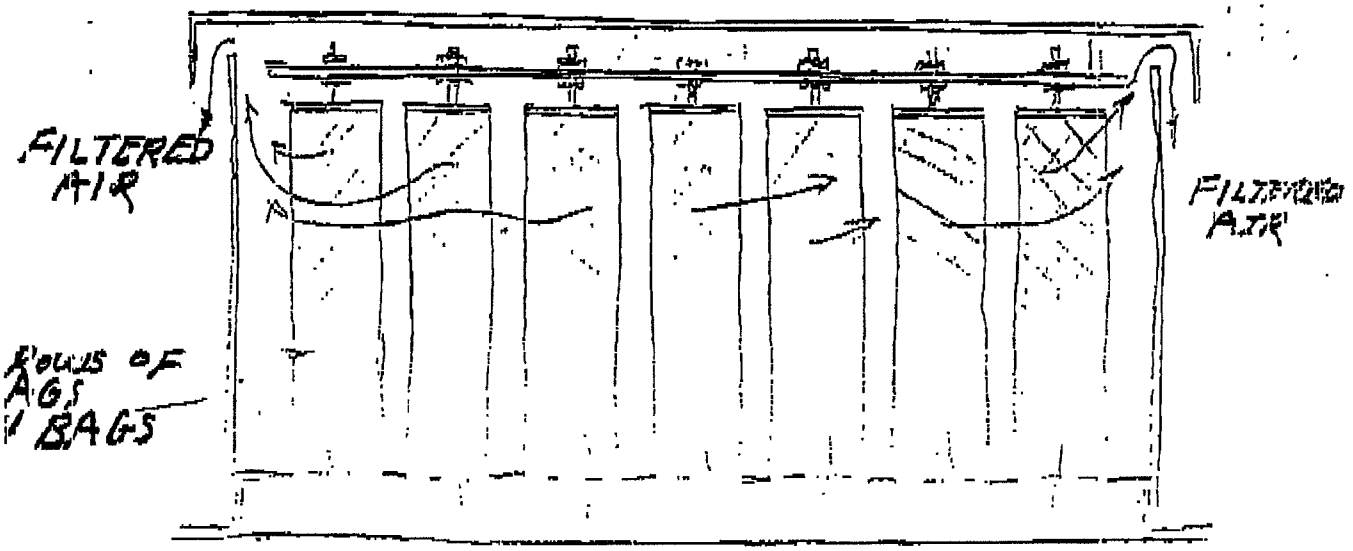
GRAND TOTAL

	HP	FLA			
Total Connected	136.50	179.77			
+25% of Largest Motor	25.00	8.15		Actual	
Running Design Load		187.92	Running Design	149.72	KVA
+5 x Largest Motor		163.04			
Starting Design Load		350.97	Starting Design	279.62	KVA

112.5 KVA Transf. Volt Drop=	9.07%	Starting, and	4.86%	when running.
Note: This will create a	33.09%	continuous overload w/listed items.		
150 KVA Transf. Volt Drop=	6.80%	Starting, and	3.64%	when running.
225 KVA Transf. Volt Drop=	4.53%	Starting, and	2.43%	when running.

BV-14-23





CONTAMINATED AIR

CROSS SECTION OF BV-14-23

CON-E-CO
CONCRETE EQUIPMENT COMPANY

30-250 Filter Vent MAINTENANCE & OPERATION

OPERATION

The CON-E-CO 30-250 Filter Vents are designed for efficient operation and cleaning. The contaminated air enters the dust collector through its bottom flanged opening at the top of the silo. In the silo, many of the heavy dust particles settle out of the air stream due to a reduction of air velocity. From the silo, the dust laden air flows up through the inside of the filter bags where the dust particles are trapped by the filter bags thus allowing the clean air to pass through the bags into the clean air chamber. From there, the air flows through the exhaust opening and into the atmosphere.

BAG CLEANING

The 30-250 filter vent cleans the filter bags with a vibrator located above the bags. The cleaning cycle is activated after the delivery truck has finished unloading. The duration is adjusted by the operator. Materials are vibrated free while cleaning the bags. These materials fall back into the silo.

Examine the bags each week to check for excessive build up on the inside of the bags. If excessive build up occurs, decrease the time between cleaning cycles. The best efficiency and longest bag life is obtained by cleaning the bags as often as necessary. A thin even coating of material should coat the inside of the filter bags for the most effective filtration. The dust cakes on the inside of the bags to help filter the fine particles; so if bags are cleaned too often, part of their cleaning efficiency is lost.

MAINTENANCE

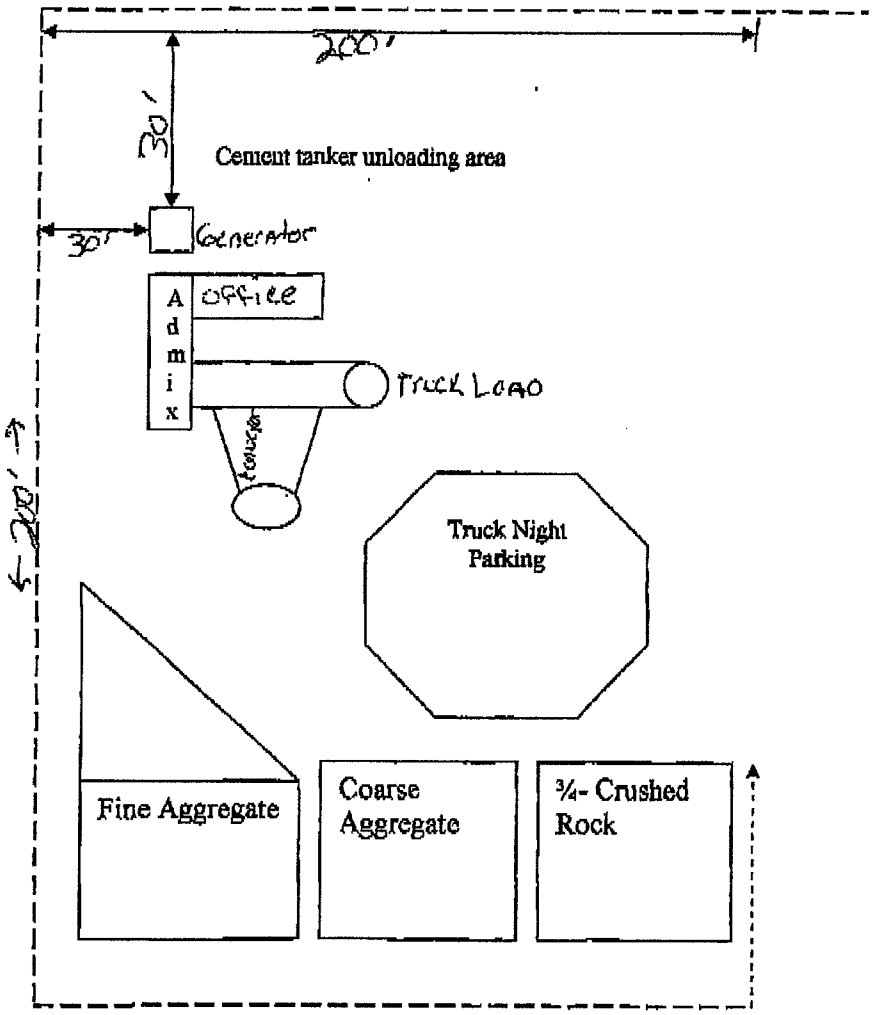
The filter bags can be removed and inspected for tears and thin places. Laundering, mending or repair of the seamless bags is not recommended. The bags are made of seamless woven polyester fabric and if laundered shrinking may take place. Replacement bags are available from CON-E-CO.

SPARE PARTS

Parts should be ordered from Manufacturer to insure compatibility. If parts are needed, obtain serial number from the name plate and call the factory. A complete detailed record of the vent is on file at CON-E-CO.

SAFETY INFORMATION

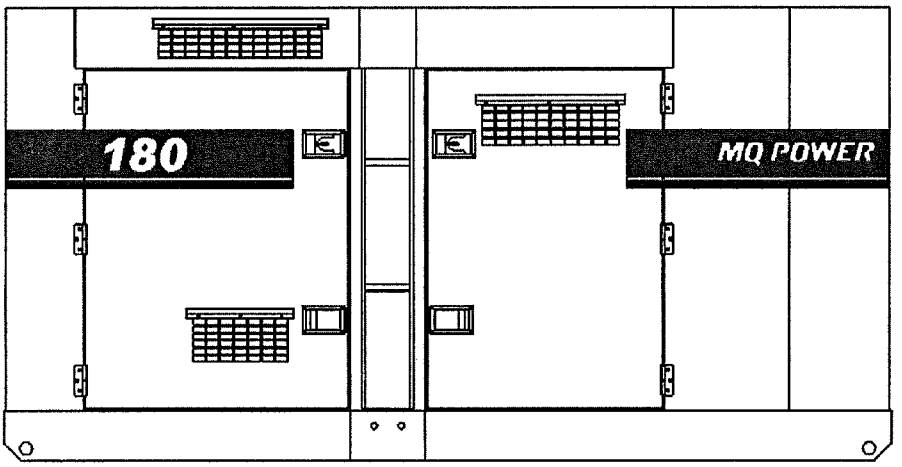
This CON-E-CO dust collector, like other industrial equipment, must be operated and maintained in accordance with our instructions and sound engineering practices. The user of this equipment must always be aware of the physical and chemical properties of the dust particles being collected. Materials or processes presenting such hazards must be identified by the user.


200'
30'
Cement tanker unloading area
30'
Generator
Admix
Office
Truck Load
Truck Night Parking
Fine Aggregate
Coarse Aggregate
¾- Crushed Rock

DCA180SSJ
WhisperWatt™ Generator

WhisperWatt™ 180kW

Prime Rating: 144 kW (180 kVA)
Standby Rating: 158 kW (198 kVA)
60 Hertz



Standard Features

- **Heavy duty, 4-cycle, direct injection, turbocharged, air to air intercooled diesel engine** provides maximum reliability.
- **Brushless alternator** reduces service and maintenance requirements and meets temperature rise standards for Class F insulation systems.
- **Open delta alternator design** provides virtually unlimited excitation for maximum motor starting capability.
- **Automatic voltage regulator** (AVR) provides precise regulation.
- **Electronic governor system** maintains frequency to ±0.25%.
- **Full load acceptance** of standby nameplate rating in one step (NFPA 110, para 5-13.2.6).
- **Sound attenuated, weather resistant, steel housing** provides operation at 72 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- **Internal fuel tank** with direct reading fuel gauges are standard.
- **Fuel/water separator** removes condensation from fuel for extended engine life.
- **Seven stage powder coat paint** provides durability and weather protection.
- **Emergency stop switch**
- **Complete engine analog instrumentation** includes DC ammeter, oil pressure gauge, water temp. gauge, fuel level gauge, tachometer/hour meter, manual engine speed control, and emergency shutdown monitors.
- **Complete generator analog instrumentation** includes voltage regulator control, ammeter phase selector switch, voltmeter phase selector switch, AC voltmeter, AC ammeter, frequency meter, panel light, and circuit breaker.
- **Automatic safety shutdown system** monitors the water temperature, engine oil pressure, overspeed, and overcrank. Warning lights indicate abnormal conditions.
- **Low coolant level shutdown system** provides protection from critically low coolant levels. Includes control panel warning light.
- **Auto start/stop control** allows generator to start automatically in the event of a commercial power failure.
- **Complete power panel.** Fully covered; three-phase terminals and single phase receptacles allow fast and convenient hookup for most applications including temporary power boxes, tools and lighting equipment. All are NEMA standard.
- **EPA-MOH emissions certified** - Tier 3 emissions compliant.

DCA180SSJ
WhisperWatt™ Generator

Specifications

Generator Specifications	
Design	Revolving field, Self-ventilated, Drip-proof, Single bearing
No. of Poles	4-pole
Excitation	Brushless with AVR
Standby Output	158 KW (198 KVA)
Prime Output	144 KW (180 KVA)
Generator RPM	1800
Voltage - 3 phase	208, 220, 240, 415, 440, 480V Reconnectable
Voltage - single phase	120, 127, 139, 240, 254, 277V Adjustable
Armature Connection	Star with neutral
Voltage Regulation (No load to full load)	±1.0%
Power Factor	0.8
Frequency	60 Hz
Frequency Regulation: No Load to Full Load	Isochronous under varying loads from no load to 100% rated load
Frequency Regulation: Steady State	±0.25% of mean value for constant loads from no load to full load
Insulation	Class F
Sound Level dB(A) Full load at 23 feet	72

Engine Specifications	
Make/Model	John Deere / 6068HF485
Emissions	EPA Tier 3 Certified
Starting System	Electric
Design	4-cycle, Watercooled, Direct injection, Turbocharged, Air to air intercooled
Displacement	6800 cc
No. cylinders	6
Bore x Stroke (mm)	106 x 127
Gross Engine Power Output	315 hp (235 kW)
BMEP	304 psi (2094 kPa)
Piston Speed	1134 ft/min (5.76 m/s)
Compression Ratio	17 : 1
Engine Speed	1800 rpm
Overspeed Limit	2100 rpm
Oil capacity gallons (liters)	8.69 (32.9)
Battery	12V 128 Ah

Fuel System		
Recommended Fuel	ASTM-D975-No.1 or No. 2-D	
Maximum Fuel Flow (per hour)	22.7 gal. (85.9 L)	
Maximum Inlet Restriction (Hg)	5.9 in. (150 mm)	
Fuel Tank Capacity	100 gal. (380 L)	
Fuel Consumption	**gph**	**lph**
full load	11.4	43.0
75% load	9.0	34.1
50% load	6.6	25.1
25% load	4.3	16.2

Amperage	
Rated Voltage	**Maximum Amps**
1Ø 120 Volt	400.0 amp (4 wire)
1Ø 240 Volt	200.0 amp (4 wire)
3Ø 240 Volt	433 amp
3Ø 480 Volt	216 amp

Cooling System	
Fan Load	21.5 hp (16 kW)
Coolant Capacity (with radiator)	6.3 gal. (24 L)
Coolant Flow Rate	70 gal. (265 L)
Heat Rejection to Coolant	5404 Btu (5.7 MJ)
Heat Radiated to Room	3264 Btu (3.44 MJ)
Maximum Coolant Friction Head	2 psi (13.8 kPa)
Maximum Coolant Static Head	21 ft. (6.4)
Ambient Temperature Rating	104°F (40°C)

Air	
Combustion Air	619 cfm (17.5 m^3/min)
Maximum Air Cleaner Restriction	25.0 in H^20 (6.25 kPa)
Alternator Cooling Air	1459 cfm (41.3 m^3/min)
Radiator Cooling Air	8120 cfm (230 m^3/min)
Minimum Air Opening to Room	14.8 sq. ft. (1.38 sq. m)
Minimum Discharge Opening	6.71 sq. ft. (0.62 sq. m)

Exhaust System	
Gas Flow (full load)	1371 cfm (38.8 m3/min)
Gas Temperature	905°F (485°C)
Maximum Back Pressure	40.0 in. H^20 (10 kPa)

Warranty*

John Deere Engine

12 months from date of purchase and unlimited hours or 24 months from date of purchase with 2000 hours (whichever ocurs first).

*Refer to the express written, Engine warranty sheet for additional coverage information.

Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

*Refer to the express written, one-year limited warranty sheet for additional information.

Trailer

12 months excluding normal wear items.

Backfeed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device.

Specifications are subject to change without notice.

DCA180SSJ
WhisperWatt™ Generator

MQ POWER DECIBEL LEVELS

Our soundproof housing allows substantially lower operating noise levels than competitive designs. WhisperWatts are at home on construction sites, in residential neighborhoods, and at hospitals — just about anywhere.

- 90 — Subway / truck traffic
- 80 — Average city traffic
- WhisperWatt at 23 feet
- 70 — Inside car at 60 mph
- 60 — Air conditioner at 20 feet
- 50 — Normal conversation

72.0 DECIBELS

Optional Control Features

- ❑ **Audible alarm** — alerts operator of abnormal conditions.

Optional Fuel Cell Features

- ❑ **Trailer fuel tank** — a second fuel cell located in the trailer allows for extended run time.
- ❑ **Sub-base fuel cells (double wall)** — Additional fuel cell for extended runtime operation. Contains a leak sensor, low fuel level switch, and a secondary containment tank. UL142 listed.
  - ❑ 12 hours of minimum run time.
  - ❑ 24 hours of minimum run time.

Optional Generator Features

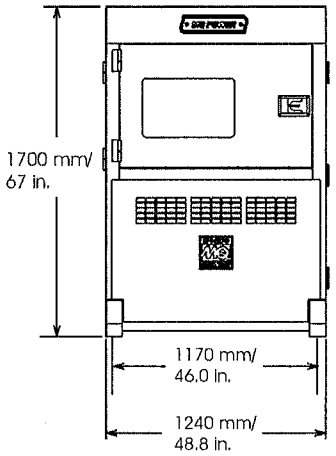
- ❑ **Battery charger** — provides fully automatic and self-adjusting charging to the generator's battery system.
- ❑ **Jacket water heater** — for easy starting in cold weather climates.
- ❑ **Special batteries** — long life batteries provide extra engine cranking power.
- ❑ **Spring isolaters** — provides extra vibration protection for standby applications.
- ❑ **Trailer mounted package** — highway legal trailer with electronic or surge brakes with tandem axle configuration. Extra capacity fuel tanks are also available.

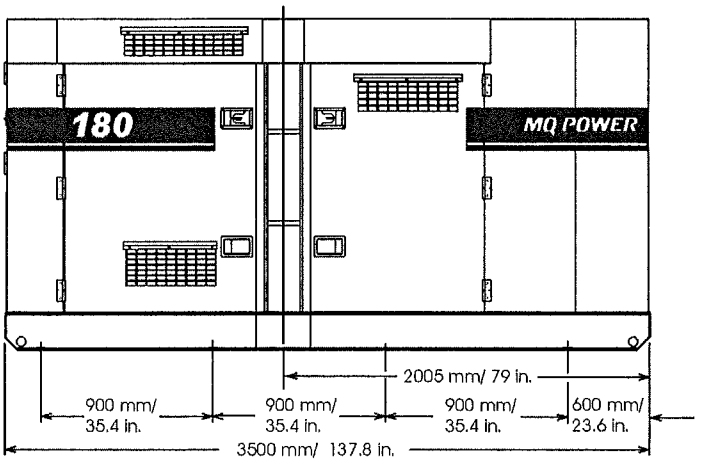
Optional Output Connections

- ❑ **Cam-Loks** — provides quick disconnect alternative to bolt-on connectors.
- ❑ **Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.
- ❑ **Output Cable** — available in any custom length and size configuration.

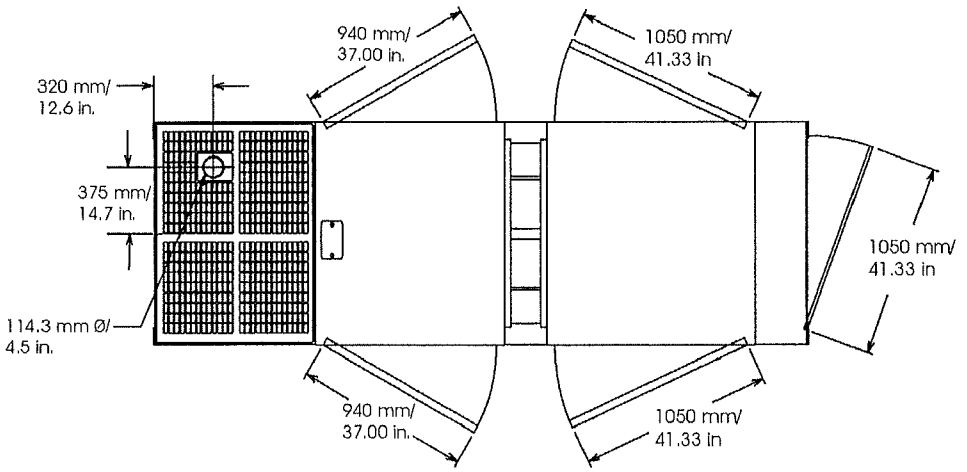
DCA180SSJ
WhisperWatt™ Generator

Dimensions





Weight	
Dry Weight	6571 lbs. (2980 kg)
Wet Weight	7489 lbs. (3400 kg)



Manufactured by Denyo Co.

Your MQ Power dealer is:

MQ POWER
POST OFFICE BOX 6254
CARSON, CA 90749
310-537-3700 • 800-883-2551
FAX: 310-604-3831
E-MAIL: mqpower@multiquip.com
WEBSITE: www.mqpower.com

EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET

Model: DCA180SSJ

The engine used in this generator set is certified to comply with United States EPA Tier 3 and CARB Mobile Off-Highway emission regulations.

ENGINE DATA

Manufacturer:	JOHN DEERE	Bore:	4.17 in.	(106 mm)
Model:	6068HF485	Stroke:	5.00 in.	(127 mm)
Type:	4-Cycle Diesel, In-Line, 6-Cylinder	Displacement:	415 cid	(6.8 liters)
Aspiration:	Turbocharged, Air-To-Air Intercooler	Compression Ratio:	17:1	

PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz)	315
Rated Load Fuel Consumption (gal/Hr)	11.4
Rated Load Exhaust Gas Flow (cfm)	1371
Rated Load Exhaust Gas Temperature (F)	905

United States EPA - Mobile Off-Highway Tier 3 Limits - ≥302 BHP - ≤602 BHP

Criteria Pollutant	Emission Requirements	Certified Engine Emissions
NOx (Oxides of Nitrogen as NO2)	2.98 gr/bhp-hr	2.53 gr/bhp-hr
HC (Total Unburned Hydrocarbons)	(NOx + HC)* Combined	(NOx + HC)* Combined
CO (Carbon Monoxide)	2.61 gr/bhp-hr	0.45 gr/bhp-hr
PM (Particulate Matter)	0.15 gr/bhp-hr	0.08 gr/bhp-hr

EPA Engine Family:	7JDXL06.8101
EPA Certificate of Conformance:	JDX-NRCI-07-01
ARB Executive Order:	U-R-004-0280
Effective Date:	Model Year 2007

Note: Engine operation with excessive air intake or exhaust restriction beyond factory published maximum limits, or with improper service maintenance, may result in higher emission levels.

ATTN: Troy
per Dale @ Romero
Construction
3 pgs

California Environmental Protection Agency AIR RESOURCES BOARD	JOHN DEERE POWER SYSTEMS OF DEERE	EXECUTIVE ORDER U-R-004-0280 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2007	7JDXL06.8101	4.5, 6.8	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Engine Control Module, Turbocharger, Charge Air Cooler, Exhaust-Gas Recirculation (EGR)	Loader, Tractor, Pump, Compressor, Generator Set, Other Industrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD), and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr); and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
130 ≤ kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
225 ≤ kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	-	-	3.4	0.6	0.11	8	1	14

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 20 day of December 2006.

Annette Hebert, Chief
Mobile Source Operations Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

2007 Model Year Certificate of Conformity

Manufacturer:	JOHN DEERE POWER SYSTEMS OF DEERE AND COMPANY
Engine Family:	7JDXL06.8101
Certificate Number:	JDX-NRCI-07-01
Intended Service Class:	NR 5 (75-130) NR6 (130-225)
Fuel Type:	DIESEL
FELs: g/kW-hr	NMHC+NOx: N/A NOx: N/A PM: N/A
Effective Date:	12/14/2006
Date Issued:	DEC 19 2006

Karl J. Simon, Acting Director
Compliance and Innovative Strategies Division
Office of Transportation and Air Quality

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 89, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 89 and produced in the stated model year.

This certificate of conformity covers only those new nonroad compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 89 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 89.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 89.129-96 and 89.506-96 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 89. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void ab initio for other reasons specified in 40 CFR Part 89.

This certificate does not cover nonroad engines sold, offered for sale, or introduced, or delivered for introduction into commerce in the U.S. prior to the effective date of the certificate.

Attachment 5

Air Modeling Input/Output Files

Modeling Summary
Temporary Concrete Batch Plant, Mountain Home, Idaho
Romero General Construction Corp.

	Generator						Concrete Batch Plant			Combined Sources				
	Emissions	Model Results (ug/m^3)					Emissions	Model Results (ug/m^3)		Model Results (ug/m^3)				
Pollutant	(g/s)	1 hr	3 hr	8 hr	24 hr	Annual	(g/s)	24 hr	Annual	1 hr	3 hr	8 hr	24 hr	Annual
PM_{10}	0.007				0.09	0.02	0.21	10.49	0.86				10.59	0.88
SO_2	0.081		2.96		1.08	0.22	--				2.96		1.08	0.22
NO_x	0.221					0.59	--							0.59
CO	0.039	2.87		1.03			--			2.87		1.03		
As	--						8.66E-06		3.54E-05					3.54E-05
Cr (VI)	--						4.86E-06		1.99E-05					1.99E-05
Ni	--						2.89E-05		1.18E-04					1.18E-04

Note: Modeling results from separate Generator modeling runs and the Concrete Batch Plant modeling runs were mathematically summed together to determine the ambient impact associated with the combined sources.

Generic Modeling Results Using Unit Emission Rate of 1 g/s

Max Modeled Values	Generator	Concrete Batch Plant
1 hr - 2nd high	72.86676	--
3 hr - 2nd high	36.39958	--
8 hr - 2nd high	26.03304	--
24 hr - 1st high	--	53.84349
24 hr - 2nd high	13.28497	49.75554
Annual - 1st high	2.65557	4.08979

Source: AERMOD Output for two modeling scenarios. Maximum value for each averaging period was selected from model runs completed w/ met data spanning years of 1988 through 1992.

Attachment 4

Equipment Specifications